

or cavernous hemangiomas. The argon laser is mainly used to ablate vascular malformations and vascular tumors, but is also used to treat some benign pigmented lesions, warts, benign tumors and tattoos.

Laser ablation of abnormal tissue does not differ qualitatively from other modes of tissue destruction. There are, however, a number of important advantages to this mode of treatment. Extreme localization of the beam minimizes perilesional injury. The laser is excellent at cauterizing small blood vessels so that a dry operative field and reduced postoperative edema are obtained. The wound is sterilized by the laser beam and, thus, one may operate in a contaminated field. In addition, postoperative pain is often less than with other destructive procedures because small nerve endings are sealed.

There are several disadvantages to laser surgical procedures. The equipment is expensive and not highly portable. In addition, it is technically sophisticated and, thus, may be prone to major malfunctions. Because the beam is so powerful, human error in its use can lead to significant cutaneous burns or eye injuries.

The near future should bring greater use of a newly developed tunable dye laser that uses a carefully chosen wavelength (577 nm), which is very selectively absorbed by blood. Thus, abnormal vascular channels can be ablated without damaging surrounding normal structures.

NORMAN LEVINE, MD
Tucson

REFERENCES

- Arndt KA, Noe JM, Northam DB, et al: Laser therapy—Basic concepts and nomenclature. *J Am Acad Dermatol* 1981 Dec; 5:649-654.
Bailin PL: Lasers in dermatology—1985. *J Dermatol Surg Oncol* 1985 Mar; 11:328-334.
Polla LL, Tan OT, Garden JM, et al: Tunable pulsed dye laser for the treatment of benign cutaneous vascular ectasia. *Dermatologica* 1987 Jan; 174:11-17.

Dysplastic Nevus—Markers and Precursors of Malignant Melanoma

THE INCIDENCE of malignant melanoma is doubling every decade and will affect 25,800 Americans this year, of whom 5,800 will die. No effective treatment is currently available for those with metastatic disease, the only cure for melanoma being early detection and prompt surgical excision.

More than half of those in whom melanoma develops are marked by a recently discovered, clinically distinctive type of nevus that shows histologic dysplasia. "Dysplastic" nevi often appear during adolescence, giving alert clinicians time to spot affected persons and to train them in self-examination and periodic professional examinations in time to intercept developing melanomas during the highly curable, superficial radial growth phase. Inheritance is autosomal dominant with a high degree of penetrance but with a great variety of phenotypic expression, varying from more than 50 large, irregularly pigmented lesions in more severely affected cases to the more common presentation of several or even solitary small, subtle lesions within the same family. Unlike common nevi, dysplastic nevi may continue to appear lifelong, past young adult years.

Any "new" or changing nevus occurring after age 30 should be carefully examined for evidence of melanoma or dysplasia. Identification requires bright, close, tangential, incandescent illumination (preferably halogen) within 30 cm (12 in) of the skin with an examination lamp. Gently stretching the skin unfolds the skin creases, revealing early signs of border irregularity or suffusion of pigment into sur-

rounding skin, speckled or irregular patterns of brown, black or faint pink and sometimes a relatively lighter pigment in those creases. Most dysplastic nevi have at least a small ring of flat pigment surrounding them, and many are only minimally elevated. Confirmation requires histologic examination, preferably of two or three of the most suspicious lesions. In patients with the dysplastic nevus syndrome, about a third of melanomas arise from the dysplastic nevi themselves, a third from normal-appearing nevi and a third apparently de novo from the surrounding skin.

In families with several members affected with dysplastic nevi and with a history of multiple melanomas, an affected person's risk of melanoma developing by age 59 may be 56%. As much as 7% of the white population in the United States may be affected with dysplastic nevi but are without a family history of multiple melanomas. The lifetime risk of melanoma in these persons is under investigation and has been estimated at 6%, high enough to warrant monthly self-examinations, periodic professional complete skin examinations and precautionary sun-exposure and sunburn-reducing techniques. Family screening of their relatives by the author in a collaborative study with the National Cancer Institute has detected some previously undiagnosed melanomas.

For color photographic resources, write to:

- The Skin Cancer Foundation, 245 Fifth Ave, New York, NY 10016.
- The Atypical Mole and Melanoma Education Foundation, PO Box 2099, Napa, CA 94558.
- Norcal Mutual Insurance Company, Loss Prevention Dept, 333 Market St, San Francisco, CA 94105 (videotape entitled "Melanoma: A costly oversight.")

WILLIAM A. CRUTCHER, MD
Napa, California

REFERENCES

- Crutcher WA: Undressing dermatologic patients: Round 2 (Letter). *J Am Acad Dermatol* 1986 Jan; 14:135-137.
Greene MH, Clark WH Jr, Tucker MA, et al: Acquired precursors of cutaneous malignant melanoma—The familial dysplastic nevus syndrome. *N Engl J Med* 1985 Jan 10; 312:91-97.
Kelly JW, Crutcher WA, Sagebiel RW: Clinical diagnosis of dysplastic melanocytic nevi—A clinicopathologic correlation. *J Am Acad Dermatol* 1986 Jun; 14:1044-1052.
Kraemer KH, Tucker M, Tarone R, et al: Risk of cutaneous melanoma in dysplastic nevus syndrome types A and B. *N Engl J Med* 1986 Dec 18; 315:1615-1616.
Sagebiel RW: Diagnosis and management of premalignant melanocytic proliferations. *Pathology* 1985 Apr; 17:285-290.

Contraindications for Using Topical Steroids

IN PRESCRIBING the topical use of steroids, physicians must be aware that there are certain conditions when topical steroids are relatively or absolutely contraindicated. They must also be alert to the fact that any steroid, and in particular potent and superpotent agents, may in themselves cause topical and systemic side effects.

Using topical steroids to treat primary bacterial infections is not only *absolutely contraindicated*, but the steroid may mask the bacterial infection by its vasoconstrictive and anti-inflammatory properties, making diagnosis and treatment even more difficult. Impetigo, furuncles and carbuncles, paronychia, ecthyma, erysipelas, cellulitis, lymphangitis and erythrasma are all conditions in which the use of topical steroids is to be avoided.

Some eczematous dermatoses, blistering eruptions and papular urticaria due to bites—such as scabies—may become secondarily infected. These macerated, inflamed lesions may be treated with topical steroids in conjunction with an appro-